CUSTER ROAD BRIDGE
Custer Road spanning the Black River Drain
Carsonville vicinity
Sanilac County
Michigan

HALK AN CH 7W-CARVINA

HAER No. MI-96

## PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Northeast Region
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, P.A. 19106

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## HISTORIC AMERICAN ENGINEERING RECORD CUSTER ROAD BRIDGE

HAER No. MI-96

Location:

Custer Road spanning the Black River Drain, Carsonville Vicinity, Sanilac County, Michigan.

UTM:17.359260.4812420 Quad: Carsonville, Mich.

Date of Construction:

1905

Contractor:

Unknown

Present Owner:

Sanilac County Road Commission

Sanilac, MI

Present Use:

Vehicular bridge

Significance:

With a main span of 27.52 m (90.3 feet), this is among the longest known surviving Warren pony truss bridges in Michigan, since only fifteen percent of the total exceed eighty feet.

Project Information:

The bridge replacement became more critical after the 1991 bridge inspection indicated the 6, 17, & 19 ton load limits. To mitigate the adverse effect, the State Historic Preservation Office stipulated documentation of the historic bridge. This documentation was undertaken to fulfill the first stipulation of the Memorandum of Agreement.

R.S. Scott Associates 405 River Street Alpena, MI 49707

## Summary Description of Bridge and Setting

The Custer Road Bridge is located near the city of Carsonville in Sanilac County. Custer Road is an east-west road on a 20.12 m (66') right-of-way. The approach roadway surface is constructed of gravel material east and west of the bridge. The total approach roadway width is 8.54 m (28') with two 3.05 m (10') lanes and 1.22 m (4') shoulders at the approaches. The existing bridge has a 82.6 mm (3.25") concrete wearing surface Jack Arch deck with vertical concrete abutments. The bridge abutments are nearly perpendicular to the road centerline, and the Black River Drain crosses the road at approximately a 60° skew. The existing bridge is a one span steel Warren pony truss structure with riveted connections. There is 6.10 m (20') of clear roadway width on the existing bridge. The total length is 27.52 m (90.30').

The present average daily traffic (ADT) is 150 vehicles and is expected to reach 240 vehicles by the year 2015. The bridge is presently posted for 6, 17, & 19 ton load limits for H-truck (lunit), 3-S2 Semi (2 unit), and 3-S8 Truck (2 unit) vehicles respectively.

Custer Road bridge is significant and critical to the transportation needs of today's farm equipment, school buses, emergency vehicles, trucks and cars in this area. Currently all vehicles except cars and pickups must detour 4.83 km (3 miles).

The Black River Drain was put in for draining the run off of fields for local farmers and controlling flooding. Therefore, a good assumption would be that the bridge was put in to give local farmers access between the separated farm lands. Also, most of the roads in this area were placed on section lines and if they crossed rivers, streams or drains they build a bridge to go over them.

The information came from the Sanilac County Road Commission's bridge surveys and inspection reports.

## Bibliography

Sanilac County Road Commission, Custer Road over the Black River Drain Survey Notes, 1992.



